

# Preschoolers' Physical Development

## Case Scenario

Chris is three years old now. During his preschool years (i.e., between three and six), his body and brain will undergo the maximum growth. At two years, Chris weighed about 25 pounds and was 3 feet tall. By age six, his weight will nearly double, to almost 50 pounds, and he will grow another foot. Not only do Chris's height and weight change as he grows, he also loses his chubbiness—typical in infants and toddlers—and becomes more slender and lean. As his body develops, his proportions will become more like an adult's. Similarly, his brain will develop rapidly during this period.

Chris is physically active during the day. Sometimes, Chris has a lot of trouble falling asleep at night because he is still pepped up from a day full of physical activities. It is common for children his age to find it difficult to sleep, but this problem usually improves over time. On occasion, Chris has woken inexplicably at night in a state of terror, with his heart racing. His pediatrician explains that these are night terrors, which are common in young children and caused by neural maturation. Night terrors are not the same as nightmares. Nightmares are just bad dreams, whereas night terrors occur during stage 4, which is characterized by deep, dreamless sleep that lasts for approximately thirty minutes.

As Chris grows, it is important to provide his body with the necessary food. Children his age often eat less food than they did as toddlers because now their bodies are not growing quite as rapidly. Chris's parents are worried that he is not eating enough food, but his pediatrician assures them that this is completely normal. The pediatrician explains that they should not force Chris to "clear his plate" to appease their concern because this insistence could lead to childhood obesity.

## Nutrition

In the United States, childhood obesity is a growing problem. It is important for children to have appropriate nutrition (i.e., follow the food pyramid and avoid fast food) and physical activity to avoid unnecessary weight gain. Children should eat a variety of food, including fresh fruits and vegetables. An appropriate portion size for a preschooler is one-fourth to one-third of an adult portion of food.

**Malnutrition** (i.e., faulty nutrition, which can lead to a child being underweight) is another problem seen in this age group and is often a sign of child neglect. Child neglect occurs when parents fail to appropriately care for their children or tend to their physical and emotional needs

## Maltreatment

Other types of **child neglect**, or maltreatment, include physical abuse and psychological abuse. Maltreatment is damaging to children's physical, cognitive, and social development. For example, children who are abused tend to have poor self-esteem and misbehave. Fortunately, child maltreatment is not common.

Children are much more likely to be injured in accidents than to be victims of abuse. A preschooler might fall while running around or climbing on a table or a chair. The child might accidentally ingest some dangerous chemicals, which can cause serious health problems. When Chris started walking, his parents made sure they locked all their household cleaning materials in a cabinet that he could not access. They also had their home inspected for lead. Lead can be found in many substances (typically paint, pottery, and even dust) and can cause mental retardation and even death.

### **Motor Skills**

Though preschoolers are physically active, the variety of **motor skills** they can engage in during this time period is limited.

Like most children his age, Chris is active and spends most of his day showing off his **gross motor skills** by running, hopping, and jumping around. However, he is unable to engage in **fine motor skills**, which require smaller, delicate movements, like eating with a fork, writing with a crayon, or tying shoelaces.

As Chris progresses to middle childhood, his gross and fine motor skills will become more advanced and fine-tuned.

Two motor skills in particular are important: potty training and handedness.

### **Potty-Training**

During his preschool years, Chris's parents are working to **potty-train** him. Experts suggest that his parents should not attempt to potty-train him until he has developed bladder and bowel control, which depends on muscular and neural development. When Chris is two-and-a-half years old, he begins wanting to use a "big kid" potty. He also starts expressing discomfort when his diaper gets soiled. Chris's parents are patient and consistent while working with him. Small rewards, such as stickers or small toys, help encourage Chris to use the toilet. However, it is also important for his parents to remember that potty training cannot happen overnight.

### **Handedness**

As parents begin teaching their preschoolers how to write, they are often keen to find out whether their children are right handed (90 percent of the population) or left handed. During the preschool period, children tend to show a marked preference for one hand over the other when performing tasks. Although many myths exist about **handedness**, there is no scientific evidence

that left-handed children have any disadvantages in life. However, they are at an increased risk of accidents because of living in a “right-handed world.” According to Bower’s article “The Left Hand of Math and Verbal Talent,” left-handed children have some academic advantages. There are even scholarships available only to left-handed children. Many famous intellectuals have been and are left handed, like Michelangelo and Bill Gates.